

## REMARKS

The Office Action rejected claims 1-20 under Section 101. Claims 1, 4-13, 16-17 were rejected under 35 U.S.C. 102(c) as being anticipated by U.S. Patent Application Publication 2003/0004936 by Grune et. al. (hereafter Grune). Claims 2, 14-15, and 18-20 were rejected under 35 U.S.C. 103(a) as being unpatentable over Grune as applied to claim 1, 4-13, 16-17 above, and further in view of U.S. Patent Application Publication 2004/0123235 by Yeh et. al. (hereafter Yeh). Claim 3 was rejected under 35 U.S.C. 103(a) as being unpatentable over Grune as applied to claim 1, 4-13, 16-17 above, and further in view of "On-line Animated Visualization of Huge Graphs using a Modified Spring Algorithm" by Huang et. al. (hercafter Huang).

## THE SECTION 101 REJECTION

Applicant has amended the claims. Support for the amendment is found on page 4, line 7, among others. Applicant submits that the claims overcome the Section 101 rejection. Withdrawal of the rejection is requested.

## THE SECTION 102 REJECTION

Claims 1, 4-13, and 16-17 were rejected as anticipated by Grune, which describes a web-enabled tool that allows simultaneous intelligent searching, knowledge management based problem solving, valuation, and modeling of intellectual property and scientific information. The system accesses databases of intellectual property and scientific information. Additionally, the computer-based logic flow utilizes valuation techniques bascd on the Black-Scholes Options Pricing model or discounted cash flow

methods. The system receives user queries and can simultaneously and automatically access an intellectual property database, a scientific information database, a knowledge management based problem solving database, and a valuation based algorithm database to categorize, analyze, and disseminate pertinent information resulting in modeling and display. The system, method and computer-based logic flow also allows for the simultaneous display of intellectual property and valuation information in one model as well as the non-intellectual property protected scientific information. The user can easily, quickly and accurately obtain information vital to determining the content, value, and direction of current and future specific technology trends based on review of models and displays indicating both protected and non-protected intellectual property associated with that specific technology (Grune Abstract).

Page 4 of the Office Action noted that:

A method for mapping intellectual property[Grune, 0010, search and map patents], comprising:

searching one or more remote databases for one or more relevant patents [Grune, 0027, allows a user to enter a query via a client computer that is connected to a server on a global area network. Intelligent searching also provides a user access to the stored intellectual property and scientific information contained on various databases.]; and

performing a network analysis on the relevant patents [Grune, 0003, search and analysis of patents. 0026, analyze each technology (protected or not protected by IP) in terms of specific type, specific quantity, specific terminology, and specific value or any other pertinent and related category contained within various databases].

Applicant respectfully traverses the rejection. A Section 102 rejection requires each and every element to be present. Here, at least the network analysis aspect is missing. As stated at the bottom of page 16 through top of page 17 of the instant application, embodiments of network analysis can be as follows:

Network analysis can generate sociograms (network diagrams) to visualize the networks being analyzed. One technique to draft a sociogram is to construct it around the circumference of a circle. The circle helps organize the data, but the order in which the points is determined only by an attempt to keep the number of lines connecting the various points to a minimum. Typically, a trial-and-error drafting process is used until an aesthetically pleasing result is achieved. While such a process can make the structure of relations clearer, the relations between the sociogram's points reflect no specific mathematical properties. The points are arranged arbitrarily and the distances between them are meaningless. A number of techniques (e.g., metric and non-metric multidimensional scaling, correspondence analysis, spring-embedded algorithms, etc.) that mathematically represent the points in space can be used.

Other embodiments of network analysis are discussed on pages 20-24 of the instant application. Further, as defined by the on-line encyclopedia Wikipedia at [http://en.wikipedia.org/wiki/Network\\_analysis](http://en.wikipedia.org/wiki/Network_analysis):

Network analysis is the analysis of networks through network theory (or more generally graph theory).

The networks may be social, transportation or virtual, such as the internet. The analysis include descriptions of structure, such as small-world networks or scale-free networks, optimisation, such as Critical Path Analysis and PERT (Program Evaluation & Review Technique), and properties such as flow assignment.

Social network analysis maps relationships between individuals in social networks.

Network analysis, and its close cousin traffic analysis, has significant use in intelligence. By monitoring the communication patterns between the network nodes, its structure can be established. This can be used for uncovering insurgent networks of both hierarchical and leaderless nature.

Link analysis is a subset of network analysis, exploring associations between objects. An example may be examining the addresses of suspects and victims, the telephone numbers they have dialed and financial transactions that they have partaken in in a given timeframe, and the familial relationships between these subjects as a part of police investigation. Link analysis here provides the crucial relationships and associations between very many objects of different types that are not apparent from isolated pieces of information. Computer-assisted or fully automatic computer-based link analysis is increasingly employed by banks and insurance agencies in fraud detection, by telecommunication operators in telecommunication network analysis, by medical sector in epidemiology and pharmacology, in law enforcement investigations, by search engines for relevance rating (and conversely by the spammers for spamdexing and by business owners

for search engine optimization), and everywhere else where relationships between many objects have to be analyzed.

Nowhere in Grune does it perform network analysis. Instead, Grune at [0003] describes internet or web-enabled tools that allow for the search of patents such as the United States Patent and Trademark Office (USPTO) Automated Patent System (APS) and Delphion's Intellectual Property Network (IPN). Additionally, Aurigin's and Delphion's tools allow for the search and analysis of patent information by mapping or clustering. This allows a user to understand how a group of patents or claims are related. Grune at [0026] allows for a user to determine an arbitrary starting point for the analysis, while allowing for a final audio/visual means to quantitatively analyze each technology (protected or not protected by IP) in terms of specific type, specific quantity, specific terminology, and specific value or any other pertinent and related category contained within various databases. These are the aforementioned databases of patents contained within specific evolving intellectual property, technological publications contained within the evolving scientific and engineering literature, and evolving Knowledge Management based systems.

Although Grune discusses searching patents using KM systems, Grune fails to show the network analysis. This network analysis involves the application of network theory or graph theory. This term is not mentioned anywhere in Grune and the element is completely missing in Grune.

As Grune completely fails to disclose the application of network analysis to IP analysis, Grune cannot anticipate claims 1 and 16 and claims that depend therefrom such as claims 4-13 and 17. Withdrawal of the Section 102 rejection is requested.

## THE SECTION 103 REJECTION

Claims 2, 14-15 and 18-20 were rejected under Section 103 as unpatentable over Grune in view of Yeh which shows a system for displaying patent analysis information includes a patent information table, a citation analyzing module, an XML (extensible markup language) converting module, an image converting module, and a user processing module. The patent information table stores summary data on patents. The citation analyzing module is used to generate citation links among patents in accordance with data stored in the patent information table, and to generate patent citation data downloading instructions to synchronize patent citation information with up-to-date citation data stored in intellectual property information websites. The XML converting module is used to convert patent citation information into XML documents. The image converting module is used to convert XML documents into star-hyperbolic trees each including a plurality of nodes. The user processing module is used to receive patent analysis orders, and has the function of displaying star-hyperbolic trees on a display unit.

However, as discussed above, neither Grune nor Yeh shows the network analysis element in the independent claims. As this element is completely missing in Grune and Yeh, they cannot render the claims obvious. Additionally, there is no teaching or motivation to combine a network analysis reference with patent analysis.

With respect to the remaining dependent claims, the references do not show for each patent, creating spring relationship among patents based on number of citation of patent prior art; and generating a spring mass diagram. There is no clusterizing of patents according to word similarity.

The references do not show three-dimensionally visualizing the patents on a 3D display device. There is no generating a visualization of the patents for display on a screen or plotting on a large format plotter.

Further, the references do not show caching results from prior IP maps in a remote computer or retrieving a cached IP map in response to a user request or periodically flushing cached IP maps to ensure a fresh IP map.

The references do not show distributing a search over a plurality of client computers, or that the client computers can be located behind a firewall, and that the system bypasses the firewall in sending distributed search results to a remote computer.

The references do not show annotating a patent at a local computer and caching the annotated patent at a remote computer to satisfy a subsequent request for said patent.

In sum, many of the specifics cited in the dependent claims are not shown.

Hence, the Withdrawal of the Section 103 rejection is requested.

Claim 3 was rejected under 35 U.S.C. 103(a) as being unpatentable over Grune as applied to claim 1, 4-13, 16-17 above, and further in view of Huang. Again, as discussed above, neither Grune nor Huang shows the network analysis element in the independent claims. As this element is completely missing in Grune and Huang, Grune singly or in combination with Huang cannot render claim 3 obvious. Withdrawal of the Section 103 rejection is requested.

#### CONCLUSION

In view of the above, Applicant respectfully submits that all claims are in condition for allowance.

If for any reasons the Examiner believes a telephone conference would in any way expedite resolution of the issues raised in this appeal, the Examiner is invited to telephone the undersigned at 408-528-7490.

Respectfully submitted,

By:   
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